



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/548,087	06/20/2006	Ivan Ivanov	1021-1005	2100

82253 7590 05/26/2010
D. Kligler I.P. Services LTD
P.O. Box 25
Zippori, 17910
ISRAEL

EXAMINER

NGUYEN, NGA X

ART UNIT	PAPER NUMBER
----------	--------------

3662

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

05/26/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

daniel@dkpat.co.il
info@dkpat.co.il

Office Action Summary	Application No. 10/548,087	Applicant(s) IVANOV ET AL.	
	Examiner NGA X. NGUYEN	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- “angular velocity sensors ... indicating a measure of a rotation of the antenna about respective axes irrespective of motion of the vehicle”.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- “Angular velocity sensors ... indicating a measure of a rotation of the antenna about respective axes irrespective of motion of the vehicle” is unclear. Does it mean the angular velocity (rotation) of the antenna including the motion of the vehicle?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 14-17 & 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima (6052084) in view of Kuroda (4586050).

With regard to claim 10 & 17, Aoshima discloses:

- A motor coupled to adjust an orientation of the antenna (see column 10, lines 39-48).
- Angular velocity sensors configured to generate outputs indicating a measure of a rotation of the antenna (see column 17, line 8-20)
- An antenna control block, which is coupled to receive and process the outputs so as to calculate a correction to be applied to the measure of the rotation, and to cause the motor to change the orientation of the antenna responsively to the measure of the rotation subject to the correction (see column 17-18, lines 25-22).

Kuroda teaches:

- Angular velocity sensors (Gyro) configured to generate outputs indicating a measure of a rotation of a platform about respective axes (see column 2-3, lines 61-16)

Art Unit: 3662

It would have been obvious to modify Aoshima by incorporating the teaching of Kuroda's system to have a gyro sensor to generate outputs indicating a measure of a rotation of the platform about respective axes to achieve the predictable results of controlling the orientation of the antenna.

With regard to claim 11 & 18, Kuroda teaches that an inclination sensor which is configured to measure an inclination of the antenna, wherein the antenna control block calculating a correction responsively to the measured inclination (see column 4, lines 13-25).

With regard to claim 12 & 19, Kuroda teaches that the angular velocity sensors are configured to sense the rotation of the antenna bout respective horizontal axes, wherein the inclination sensor is configured to measure the inclination of the antenna relative to a vertical axis (see column 4, lines 20-23)

With regard to claim 13 & 20, teaches that the control block is configured to integrate the output of the angular velocity sensors to calculate inclination angles correction of the angular velocity sensors, and compare it to the measured inclination (see column 4, lines 32-45).

With regard to claim 14-15 & 21-22, Aoshima teaches an electronic beam control block adjusting a beam direction of the antenna under control of the antenna control block (see column 12, lines 7-65).

With regard to claim 16 & 23, Aoshima teaches the antenna control block perform a corrdinate transformation (see column 17, lines 24-34).

Response to Amendment

4. Applicant's reply to the Office Action on 02/21/2010 has been fully considered but they are not persuasive.

Applicant argues that the prior arts (Aoshima and Kuroda) do not teach the claims limitations with examiner's responses following below.

With respect to amended claims 1 & 17:

- Applicant amended the claims with a new subject matter ("angular velocity sensors... indicating a measure of a rotation of the antenna about respective axes irrespective of motion of the vehicle" which applicant stated that is shown in paragraph 0001, 006, 0015 & 0026 of the PUB application 20060273958). Examiner does not agree. Those paragraphs do not teach or discuss how the angular velocity sensor measures a rotation of the antenna about respective axes irrespective of motion of the vehicle. The 112 (1st & 2nd paragraph) rejection have been made (see the above rejection).
- Applicant argues that neither Aoshima nor Kuroka teaches the gyro sensors are attached to the antenna, and that the outputs of the sensors indicate the rotation of the antenna irrespective of the vehicle motion. Examiner does not agree. Aoshima teaches that the gyro obtains the angular velocity of an antenna by inverting the detected sensitivity error and rotational angular velocity of the vehicle, est. (see the abstract, column 17, lines 8-20) which meets the claim.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3662

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGA X. NGUYEN whose telephone number is (571)272-5217. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TARCZA H. THOMAS can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGA X NGUYEN
Examiner
Art Unit 3662

NXN

/Thomas H. Tarcza/

Supervisory Patent Examiner, Art Unit 3662